

APOLLO SERIES 60 IONISATION DETECTOR

Point type conventional smoke detector

PDS201-0027

Description

This Apollo Series 60 detector derives its name from an ionisation chamber system mounted within the housing. The ionisation chamber is part of the module that includes a printed circuit board and signal processing electronics.

The ionisation chamber system is an inner reference chamber contained inside an outer smoke chamber. The outer smoke chamber has smoke inlet apertures and is fitted with an insect resistant mesh.

An Americium 241 radioactive source irradiates both the inner and outer chamber. The ionised air results in a small current flow between these chambers when supply voltage exists across them.

When smoke particles enter the ionisation chamber ions become attached to them causing a reduction in the flow of current. This imbalance in the flow of ions between the inner and outer chambers result in an alarm condition.

The detector housing is constructed from a white polycarbonate material. It has a built-in red LED that illuminates when the detector is in alarm. Locking grub-screws are also a standard feature of the Series 60 range of detectors.

Each detector needs to be used in conjunction with a universal Series 60 detector base.

Electrical

The detector is designed to be connected to a two wire monitored supply operating at a nominal voltage of 24 volts dc.

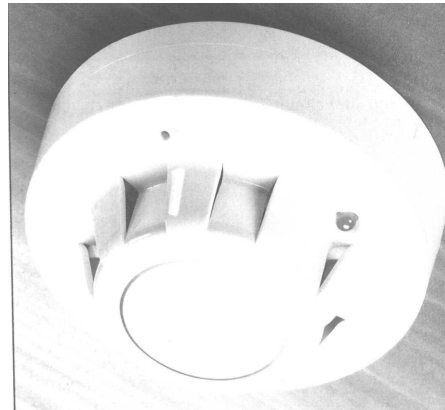
Connection to the supply is made via a mounting base between terminals L1 and L2. Terminal L1 IN is a supply input terminal and it is connected to the terminal L1 OUT via the detector when fitted. L1 OUT and L2 provide the supply output to the next detector on the zone or to the end of line resistor.

A remote alarm indicator may be connected between the positive supply line and the -R terminal. The -R terminal is diode gated to protect it against accidental connection to the negative supply and to permit the connection of more than one detector to a single remote indicator.

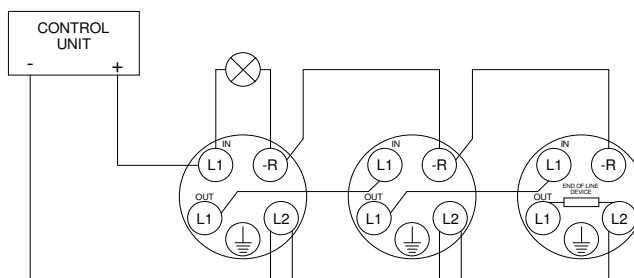
Application

- Chemical storage
- Warehouse
- Laboratories
- Common corridors

Apollo Series 60 Ionisation Detector



Wiring an Apollo Series 60 Detector



Technical Data

Detector Type	Ionisation conventional
Supply Wiring	2 wire
Supply Voltage	17 to 28 volts
Quiescent current	45uA @ 24 volts (max)
Alarm current	52 mA @ 24 volts
Remote Alarm o/p	30mA, diode gated
Storage Temp.	-30° C to 120° C
Humidity	0% to 95%
Approvals	C-Tick, SSL to AS1603
Product Code	201-0027

N.B. It is highly recommended that the Apollo mounting block (Product Code 201-0101) is used for surface mounted detectors for correct fit and reliability.